Conclusions

Seattleites are technology-users. Increasingly, residents are using the Internet and cable in many aspects of their lives: personal, business, community, and civic. Even though concern about the safety and privacy of online financial transactions, computer viruses, and SPAM is high, Seattleites continue to want electronic access to information and services, as well as the opportunity to create their own content via public access television and web sites. As more services and technologies become available, Seattleites are likely to adopt them, creating a need for increasing infrastructure capacity to support emerging applications.

Despite a high level of technology use by Seattle residents – 85% are current computer or Internet users and most of these have home access – Seattle still has a significant digital divide. Older Seattleites or those with less income or education are less likely to be current or comfortable technology users, although more education and younger age seem to offset the negative effects of low income on access to technology. Lower levels of connectivity are also evident among African American respondents, but the gap is not as pervasive as with the seniors and those with less income or education. The top two reasons for not having a computer at home are cost and lack of interest.

Most demographic subgroups are growing in their use and comfort with technology, but not all and not all at the same rate. For example, the lowest income households had the greatest gains in home computer access, but seniors alone have not increased their use of the City of Seattle website since 2000.

As the assumption of access to computers, cell phones and the Internet (and now, *high speed* Internet access) grows, those without access will become increasing and disproportionately less able to access services, products and information, or interact with providers and others with an online preference. This is a challenge that should be addressed generally as each generation is likely to face it in some form or other. Even though today's young people are likely to be literate in today's technology when they become our seniors, many may not be able to keep up with tomorrow's technological innovations. Each generation has faced technological changes that some subgroups, often the community's seniors, have had difficulty adopting. Thus this is a general challenge that we will continue to face even as each generation of seniors is more technologically advanced than the previous generation.

Younger people seem to lead the way in adopting new technologies and expressing interest in technology that is not yet available, indicating that Seattleites are likely to continue to demand access to cutting edge technology into the future. For example, even though younger people are the least likely to be current cable subscribers, they were the most likely to say they would subscribe to certain cable services requiring especially high bandwidth. This finding indicates that Seattle's need for cable capacity may increase sharply as more advanced services are delivered over cable, enticing current younger non-subscribers to sign up and continue to grow.

Seattleites are involved in their communities and value participation. About three-fourths belong to at least one community organization (about three-fourths of which use the Internet to communicate with their members). More than three-fourths think it is important or very important to maintain Seattle's public access channel, even if they haven't ever seen it and more

than a third contribute to a website, bulletin board or online group. About three fourths have watched the Seattle Channel or visited the City of Seattle website, and a third have done both. This type of civic participation has increased since 2000.

These findings identify a challenge to governments, community organizations, and businesses to maintain equal access for all of Seattle's residents by maintaining several effective modes of communication. This challenge will be ongoing as technology continues to evolve. Today's technologically literate young people will be tomorrow's seniors, struggling to (or deciding not to) adopt tomorrow's new technology. Further, if income and education disparity remain, so will disparity in access to new technology.

Understanding what is needed to increase access for those farthest behind could point to effective outreach strategies the City could consider. Policymakers and providers may want to give some consideration to education, types of content, marketing and fees for information and communications technology services. They may want to consider whether certain new services provide public benefit and, if so, how to reduce or eliminate the barriers to entry and use found here for existing technology access and use of services.

These findings also support the need to maintain a vital program of community computers, placed in locations that are easily accessible by those disadvantaged by the digital divide. Part of such a program might include providing computers and computer support at senior centers, demonstrating the use of the Internet to research health information, or to send or receive a photograph, or to research genealogical information.

Technology is important to many Seattleites, but seemingly out of the reach of a large minority. Since communication and the delivery of services and information are becoming increasingly technology-dependent – sometimes with penalties levied for using lower-tech modes of interaction – the minority without access will find it increasingly difficult to participate on equal footing. This report identifies a need to take steps to ensure that all members of the community retain healthy access to information, goods and services.

Next research step

Additional research is warranted for limited and non-English speaking residents that were not reached by and are not represented in this survey, though it is likely that some respondents are in households with limited English speakers. To learn more about Seattle's digital divide and how to address it, the City may want to conduct a series of focus groups with individuals in "digital divide" subgroups. Some of the people in these subgroups *do not* have access and they could provide greater insight into barriers to access. Others in these subgroups *do* have access and they could provide insight into ways and reasons to overcome those barriers. Understanding what is needed to increase access and use for those farthest behind could point to effective outreach strategies the City could consider. As cell phone only households grow, research into the profiles and technology use by these groups would also be beneficial.